

FIG. 1

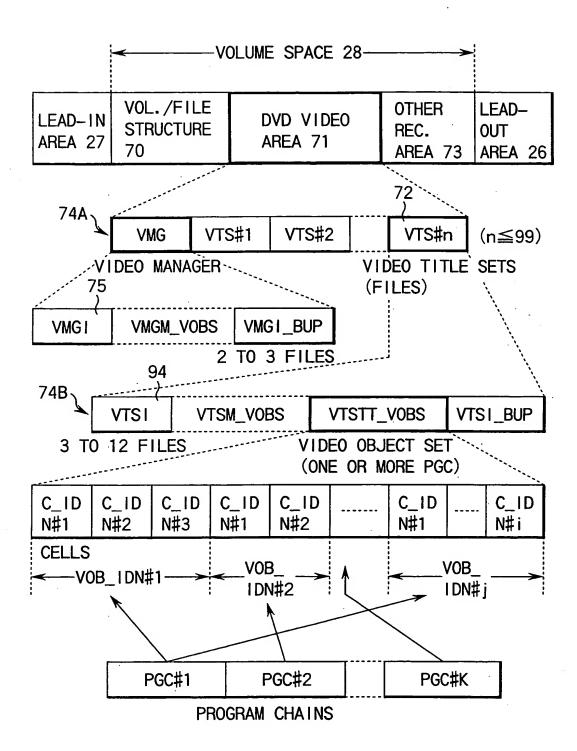


FIG. 2

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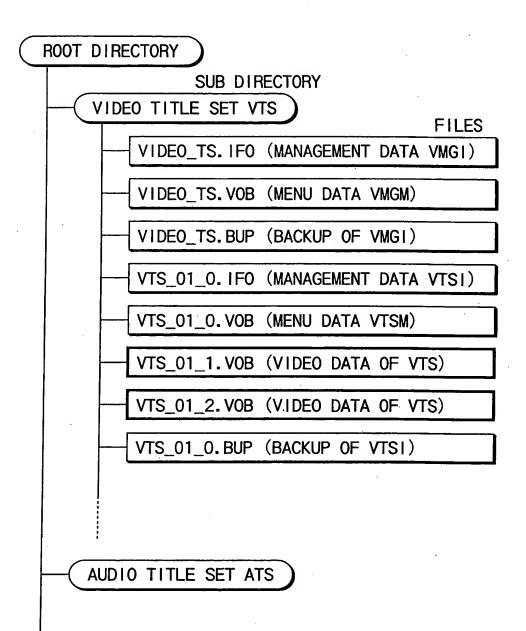
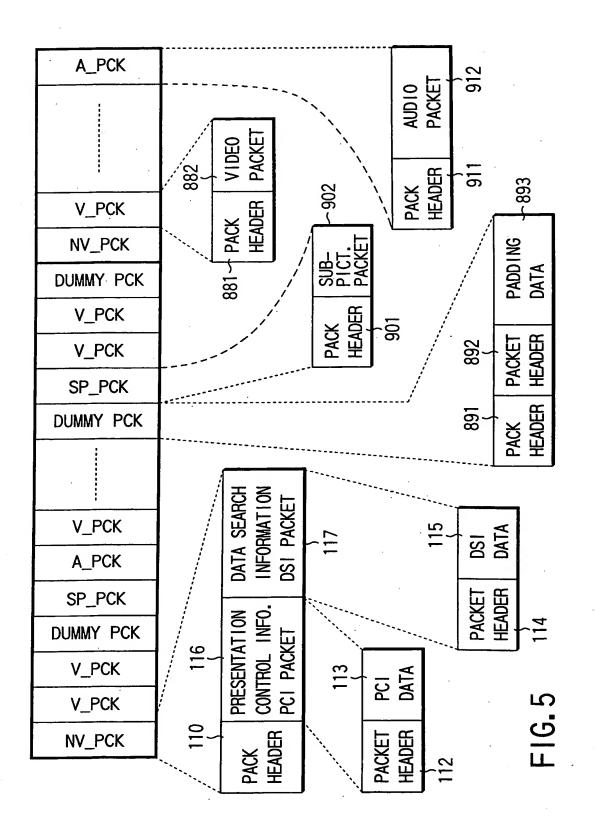


FIG. 3

		7		1		7		7	A_PCK	1_
			ECT		Œ		_ EC		A_FCK	Ã
			VIDEO OBJECT VOB_IDN#j		CELL (C_IDN#i)		VIDEO OBJECT UNIT VOBU			ARE TWO TYPES OF VOBU; ONE WITH NV_PCK, & THE OTHER WITHOUT NV_PCK)
									V_PCK	刑
								8-	NV_PCK	₩ ₩
	OBS)								DUMMY PCK	≓ ∞
	> <u> </u>								V_PCK	Ř Ř
	(VTS						5		V_PCK	≥
	OBS						VIDEO OBJECT UNIT VOBU		SP_PCK	N H
	ET V						VIDEO OBJE UNIT VOBU		DUMMY PCK	ONE
	VIDEO OBJECT SET VOBS (VTSTT_VOBS)		5		CELL (C_IDN#2)					F VOBU;
	DE0		08JE N#2				OBJE OBU		V_PCK	ES 0
	>		VIDEO OBJECT VOB_IDN#2		3		VIDEO OBJECT UNIT VOBU	9	A_PCK	TYP (
			> %		(> N	8-	SP_PCK	DWT :
			СТ		(C_IDN#1)		СТ	82-	DUMMY PCK	ARE:
			OBJE N#1		(C_1		OBJE OBU		V_PCK	THERE
2 4	83	VIDEO OBJECT VOB_IDN#1	84	CELL	85	VIDEÓ OBJECT UNIT VOBU	88-	V_PCK		
			N 0		Ç		> N	88-	NV_PCK	(NOTE:

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CONTENTS OF PRESENTATION CONTROL INFORMATION PCI

SYMBOL	CONTENTS
PCI_GI	PCI GENERAL INFORMATION
NSML_AGL I	ANGLE INFO. FOR NONSEAMLESS
HLI	HIGHLIGHT INFORMATION
RECI	RECORDING INFORMATION

FIG.6

CONTENTS OF PRESENTATION CONTROL INFORMATION GENERAL INFORMATION PCI_GI

SYMBOL	CONTENTS
NV_PCK_LBN	LOGICAL BLOCK NUMBER OF NAVIGATION PACK
VOBU_CAT	CATEGORY OF VOBU
RESERVED	RESERVED
VOBU_UOP_CTL	USER OPERATION CONTROL OF VOBU
VOBU_S_PTM	START PTM OF VOBU
VOBU_E_PTM	END PTM OF VOBU
VOBU_SE_E_PTM	END PTM OF SEQUENCE END IN VOBU
C_ELTM	CELL ELAPSE TIME
RESERVED	RESERVED

FIG. 7

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VIDEO TITLE SET VIDEO TITLE SET INFO. VTS 72 (FILE 74B) MANAGEMENT TABLE VTSI MAT VIDEO TITLE SET - 94 VIDEO TITLE SET PART INFO. VTSI OF_TITLE SEARCH POINTER VIDEO OBJECT SET TABLE VTS PTT SRPT FOR VIDEO TITLE VIDEO TITLE SET PROGRAM SET MENU CHAIN INFORMATION TABLE VTSM_VOBS VTS PGCIT VIDEO OBJECT SET VIDEO TITLE SET MENU FOR VIDEO TITLE PGCI UNIT TABLE SET TITLE VTSM_PGCI_UT VTSTT_V0BS VIDEO TITLE SET BACKUP OF VIDEO TIME MAP TABLE TITLE SET INFO. VTS TMAPT VTSI_BUP VIDEO TITLE SET MENU CELL ADDRESS TABLE VTSM C ADT VIDEO TITLE SET MENU VIDEO OBJECT UNIT ADDRESS MAP VTSM_VOBU_ADMAP VIDEO TITLE SET CELL ADDRESS TABLE VTS_C_ADT VIDEO TITLE SET VIDEO OBJECT UNIT ADDRESS MAP VTS_VOBU_ADMAP

FIG. 8

VIDEO TITLE SET INFO. VTSI 94

VIDEO TITLE SET INFO. VIST	94
VIDEO TITLE SET INFO.	
MANAGEMENT TABLE	
VTS1_MAT	
VIDEO TITLE SET PART_	
OF_TITLE SEARCH POINTER	
TABLE VTS_PTT_SRPT	
VIDEO TITLE SET PROGRAM	
CHAIN INFORMATION TABLE	
VTS_PGCIT	
VIDEO TITLE SET MENU	
PGCI UNIT TABLE	
VTSM_PGCIT_UT	4
VIDEO TITLE SET	
TIME MAP TABLE	
VTS_TMAPT	
VIDEO TITLE SET MENU	
CELL ADDRESS TABLE	
VTSM_C_ADT	
VIDEO TITLE SET MENU	
VIDEO OBJECT UNIT	
ADDRESS MAP	
VTSM_VOBU_ADMAP VIDEO TITLE SET CELL	
ADDRESS TABLE	
VTS_C_ADT	
VIDEO TITLE SET VIDEO	
OBJECT UNIT ADDRESS	
MAP_VTS_VOBU_ADMAP	

VIDEO TITLE SET PROGRAM CHAIN INFO. TABLE INFORMATION VTS_GCITI VIDEO TITLE SET PROGRAM CHAIN INFO. SEARCH POINTER #1 VTS_PGCI_SRP#1 VIDEO TITLE SET PROGRAM CHAIN INFO. SEARCH POINTER #n VTS_PGCI_SRP#n VIDEO TITLE SET PROGRAM CHAIN INFO. VTS_PGC1 VIDEO TITLE SET PROGRAM CHAIN INFO. VTS_PGC1

STRUCTURE OF PROGRAM CHAIN INFO. PGCI

PROGRAM CHAIN GENERAL INFO. PGC_GI
PROGRAM CHAIN COMMAND TABLE PGC_CMDT
PROGRAM CHAIN PROGRAM MAP PGC_PGMAP
CELL PLAYBACK INFO. TABLE C_PBIT
CELL POSITION INFO. TABLE C_POSIT

FIG. 10

CONTENTS OF CELL PLAYBACK INFO. TABLE C_PBIT

CE	LL PLAYBACK INFO. #1 (C_PBI#1)	
CE	LL PLAYBACK INFO. #2 (C_PBI#2)	
CE	LL PLAYBACK INFO. #n (C_PBI#n)	

FIG. 11

CONTENTS OF CELL PLAYBACK INFORMATION C_PBI

SYMBOL	CONTENTS
C_CAT	CELL CATEGORY
C_PBTM	CELL PLAYBACK TIME
C_FVOBU_SA	START ADR. OF 1ST VOBU IN CELL
C_FILVU_EA	END ADR. OF 1ST ILVU IN CELL
C_LVOBU_SA	START ADR. OF LAST VOBU IN CELL
C_LVOBU_EA	END ADR. OF LAST VOBU IN CELL
CELL TYPE	ERASION LEVEL FLAG 00h=PLAYBACK IS PERMITTED & AUTOMATIC ERASION IS PROHIBITED 01h=PLAYBACK IS PERMITTED & AUTOMATIC ERASION IS PROHIBITED

FIG. 12

1	(CELL CATEGO	 .		
- 1	b31 b30	b29 b28	b27	b26	b25	b24	_
	CELL BLOCK MODE	CELL BLOCK TYPE	SEAMLESS PLAYBACK FLAG	ALLOCATION	DISCONII- NUITY	SEAMLESS ANGLE CHANG FLAG	GE
	b23	b2	22 t	o21 b20	0	b16	
{	RESERVE	D CELL BACK	PLAY- ACC MODE RES	ESS TRICTION FL	.AG CE	ELL TYPE	
1	b15					t	8
			CELL	STILL TIME			
	b7	·				<u>t</u>	20
			CELL CO	MMAND NUMBI	ER		

CONTENTS OF PROGRAM CHAIN GENERAL INFO. PGC_GI

SYMBOL	CONTENTS
PGC_CNT	PGC CONTENTS
PGC_PB_TM	PGC PLAYBACK TIME
PGC_UOP_CTL	PGC USER OPERATION CONTROL
PGC_AST_CTLT	PGC AUDIO STREAM CONTROL TABLE
PGC_SPST_CTLT	PGC SUB-PICT. STREAM CONTROL TABLE
PGC_NV_CTL	PGC NAVIGATION CONTROL
PGC_SP_PLT	PGC SUB-PICTURE PALETTE
PGC_CMDT_SA	START ADR. OF PGC COMMAND TABLE
PGC_PGMAP_SA	START ADR. OF PROGRAM MAP
C_PBIT_SA	START ADR. OF CELL PLAYBACK TABLE
C_POSIT_SA	START ADR. OF CELL POS. INFO. TABLE

FIG. 14

CONTENTS OF PGC GENERAL INFO. PGC_GI FOR TRASH PGC

SYMBOL	CONTENTS
PGC_CNT	PGC CONTENTS
PGC_PB_TM	PGC PLAYBACK TIME
PGC_UOP_CTL	PGC USER OPERATION CONTROL
PGC_AST_CTLT	PGC AUDIO STREAM CONTROL TABLE
PGC_SPST_CTLT	PGC SUB-PICT. STREAM CONTROL TABLE
PGC_NV_CTL	PGC NAVIGATION CONTROL
PGC_SP_PLT	PGC SUB-PICTURE PALETTE
PGC_CMDT_SA	START ADR. OF PGC COMMAND TABLE
PGC_PGMAP_SA	START ADR. OF PROGRAM MAP
C_PBIT_SA	START ADR. OF CELL PLAYBACK TABLE
C_POSIT_SA	START ADR. OF CELL POS. INFO. TABLE
TRASH_PGC_FLG	TRASH PGC FLAG 01h=TRASH PGC 00h=CONVENTIONAL PGC

FIG. 15

CONTENTS OF C_PBI FOR TRASH PGC

SYMBOL	CONTENTS
C_CAT	PGC CATEGORY
C_PBTM	PGC PLAYBACK TIME
C_FV0BU_SA	START ADR. OF 1ST VOBU IN CELL
C_FILVU_EA	END ADR. OF 1ST ILVU IN CELL
C_LV0BU_SA	START ADR. OF LAST VOBU IN CELL
C_LVOBU_EA	END ADR. OF LAST VOBU IN CELL
PGC_N	ORIGINAL PGC NUMBER OF CURRENT CELL
C_ID_N	CORRESPONDING CELL NUMBER OF ORIGINAL PGC

FIG. 16

VOLUME SPACE 28-VOL./FILE DATA AREA LEAD IN LEAD OUT **STRUCTURE** AREA 27 AREA 26 (REWRITABLE) 70 DA DA2 DA3 DA₁ COMPUTER DATA AREA FOR COMPUTER VIDEO & AUDIO DATA AREA DATA AREA **DA21** DA22 **DA23** CONTROL **VIDEO** PICTURE AUDIO INFO. **OBJECT OBJECT OBJECT DA24** VIDEO OBJECT SET VOBS (ONE OR MORE PGC) N#3 N#2 N#1 N#2 N#1 N#1 N#i N#i OF CELL OR VOB VOB_ VOB -VOB_IDN#1 1DN#2 IDN#i PGC#1 PGC#2 PGC#K PROGRAM CHAINS 030000h (LEAD-IN START) SECTOR NO. LEAD-IN AREA 27-REF. CODE DATA AREA **ALL** CONTROL **ALL ALL** (REPEATED **(VOLUME** "172" 00h DATA 00h 00h SPACE 28) PATTERNS)

FIG. 17

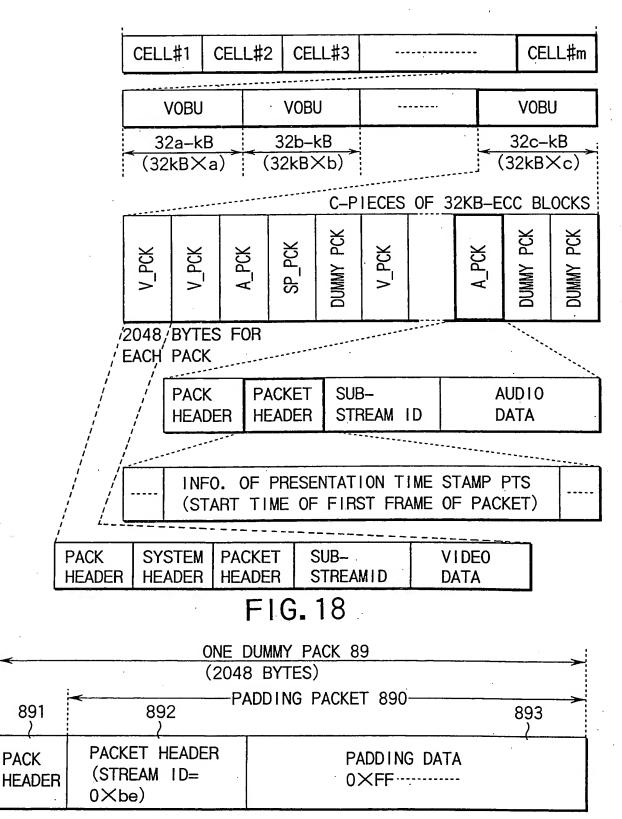


FIG. 19

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ROOT DIRECTORY

SUB-DIRECTORY DVD_RTR_DIRECTORY

FILES

RTR. IFO (NAVIGATION DATA RTR_VMG)

RTR_MOV.VRO (STREAM DATA OF MOVIE OBJECT)

RTR_STO.VRO
(STREAM DATA OF STILL PICTURE OBJECT)

RTR_STA.VRO
(STREAM DATA OF ADDITIONAL AUDIO PART FOR STILL PICTURE)

RTR=REAL TIME RECORDING

OTHER DIRECTORIES

VIDEO_TS (VIDEO TITLE SET)

AUDIO_TS (AUDIO TITLE SET)

SUB-DIRECTORIES FOR STORING COMPUTER DATA

OTHER FILES

FIG. 20

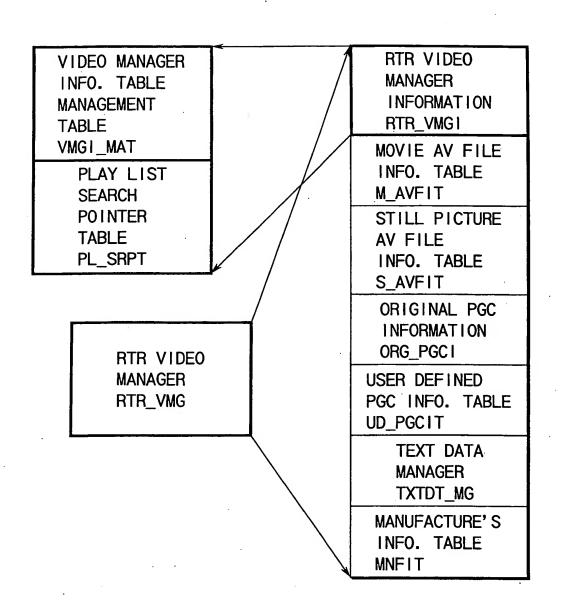
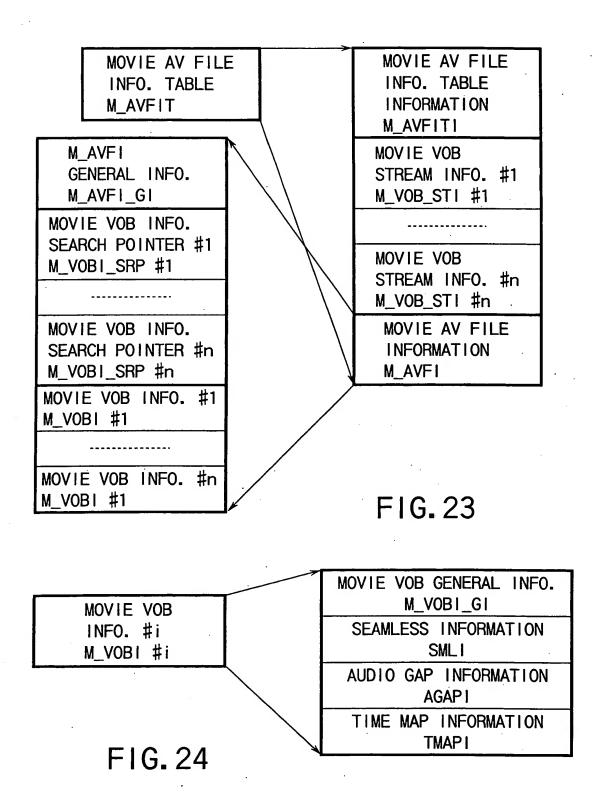


FIG. 21

CONTENTS OF VMGI_MAT

FIELD NAME	CONTENTS		
VMG_ID	VMG IDENTIFIER		
RTR_VNG_EA	END ADDRESS OF RTR_VMG		
RESERVED	RESERVED		
VMGI_EA	END ADDRESS OF VMGI		
VERN	VERSION NUMBER OF DVD SPEC. FOR VIDEO RECORDING		
RESERVED	RESERVED		
TM_ZONE	TIME ZONE		
STILL_TM	STILL TIME FOR STILL PICTURES		
CHRS	CHARACTER SET CODE FOR PRIMARY TEXT		
RSM_MRKI	RESUME MARKER INFORMATION		
REP_PICTI	DISC REPRESENTATIVE PICTURE INFORMATION		
RESERVED	RESERVED		
M_AVFIT_SA	START ADDRESS OF M_AVFIT		
S_AVFIT_SA	START ADDRESS OF S_AVFIT		
RESERVED	RESERVED		
ORG_PGC1_SA	START ADDRESS OF ORG_PGC1		
UD_PGCIT_SA	START ADDRESS OF UD_PGCIT		
TXTDT_MG_SA	START ADDRESS OF TXTDT_MG		
MNFIT_SA	START ADDRESS OF MNFIT		
RESERVED	RESERVED		

FIG. 22



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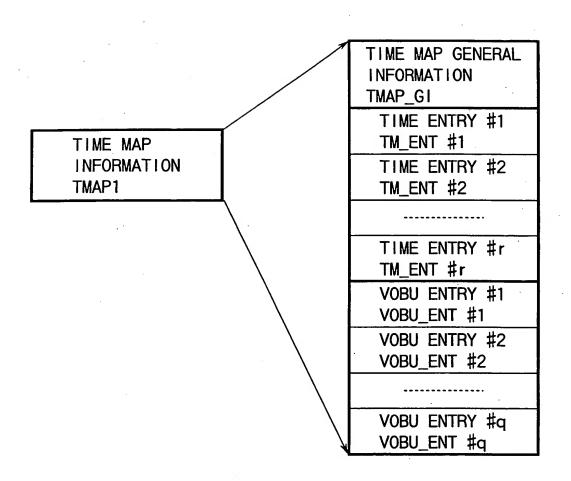


FIG. 25

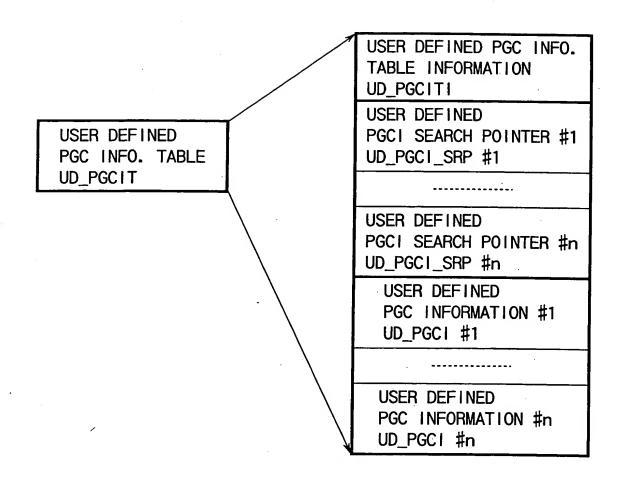


FIG. 26

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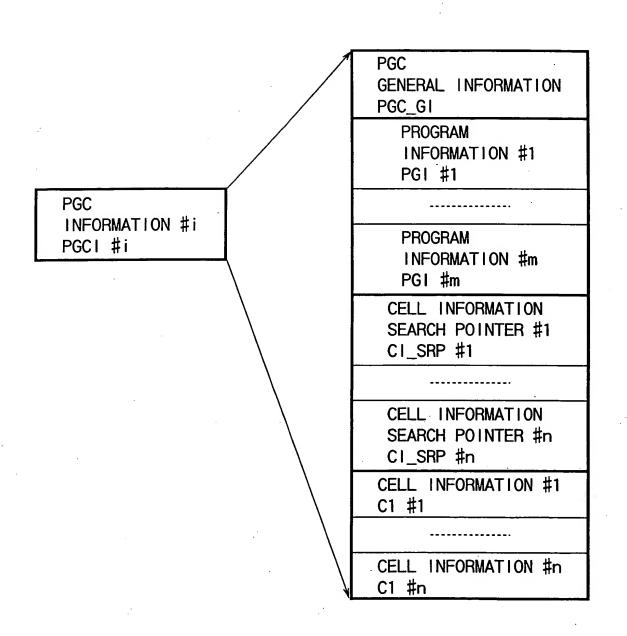


FIG. 27

CONTENTS OF PGC_GI

FIELD NAME	CONTENTS
RESERVED	RESERVED
PG_Ns	NUMBER OF PROGRAMS
CI_SRP_Ns	NUMBER OF CI SEARCH POINTERS
TRASH_PGC_FLG	TRASH PGC FLAG
	01h=TRASH PGC
	00h=CONVENTIONAL PGC

FIG. 28

CONTENTS OF PGI

FIELD NAME	CONTENTS
RESERVED	RESERVED
PG_TY	PROGRAM TYPE
C_Ns	NUMBER OF CELLS IN PROGRAM
PRM_TXT1	PRIMARY TEXT INFORMATION
IT_TXT_SRPN	ITEM TEXT SRP NUMBER
THM_PTRI	THUMBNAIL POINTER INFORMATION

FIG. 29

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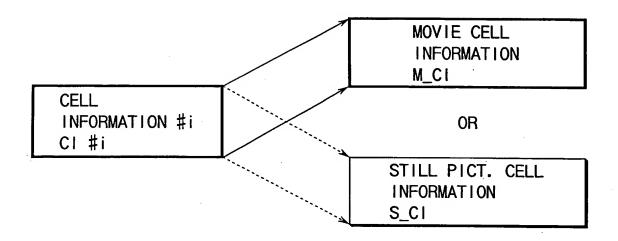


FIG. 30

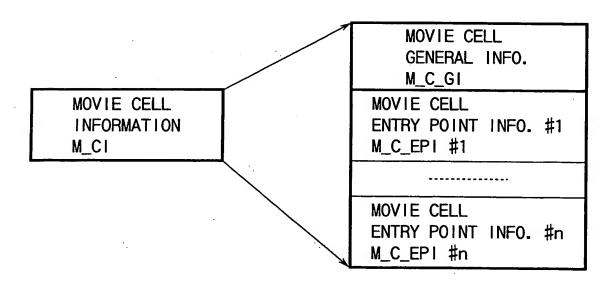


FIG. 31

CONTENTS OF M_C_GI

FIELD NAME	CONTENTS
RESERVED	RESERVED
C_TY	CELL TYPE
M_VOBI_SRPN	MOVIE VOBI SRP NUMBER
C_EPI_Ns	NUMBER OF CELL ENTRY POINT INFO.
C_V_S_PTM	PRESENTATION START TIME OF CELL
C_V_E_PTM	PRESENTATION END TIME OF CELL

FIG. 32

CONTENTS OF M_C_EP!

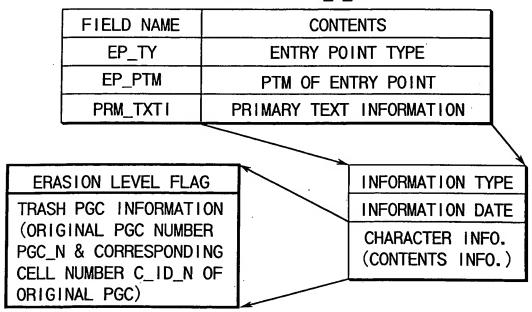
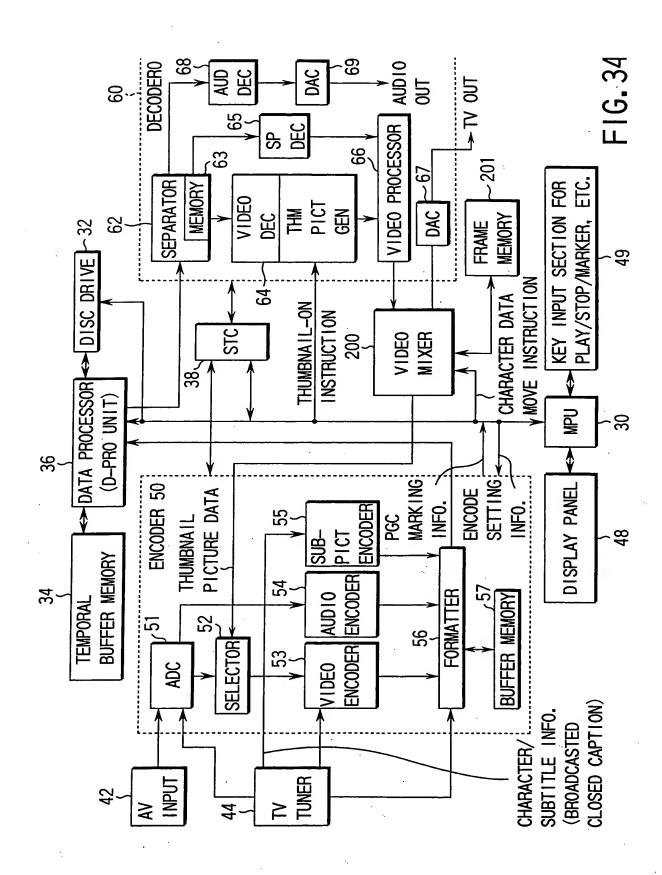
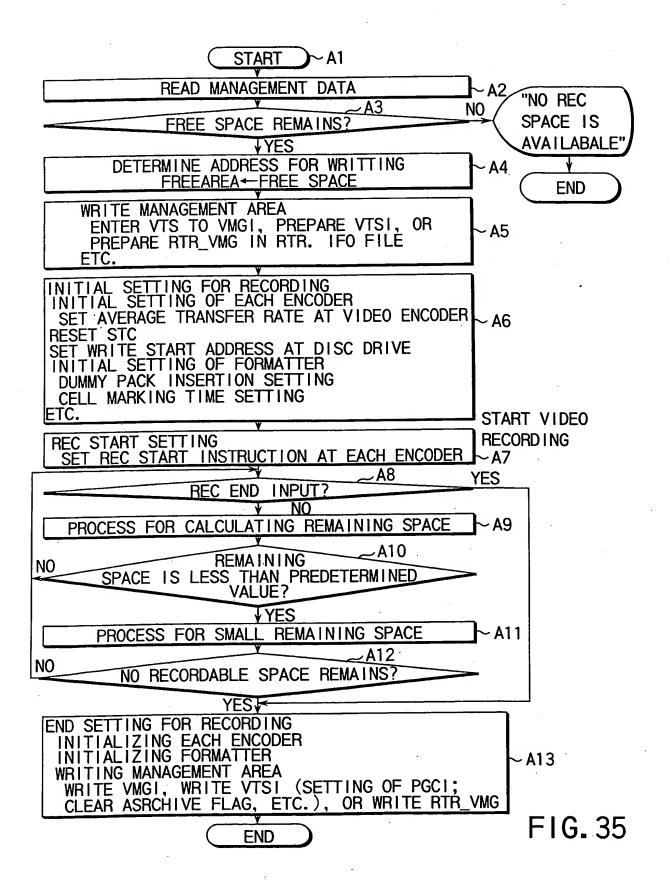


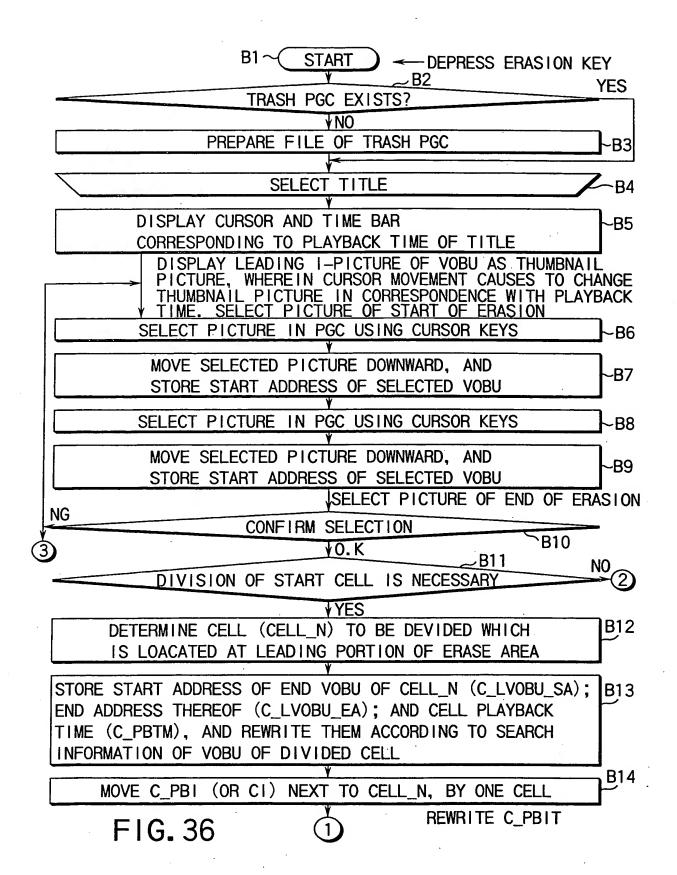
FIG. 33



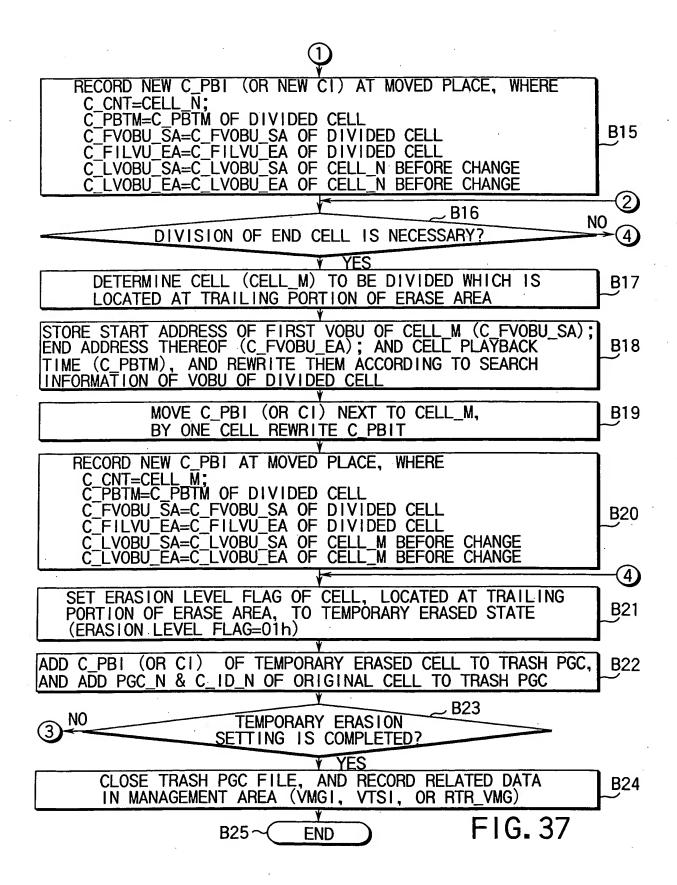
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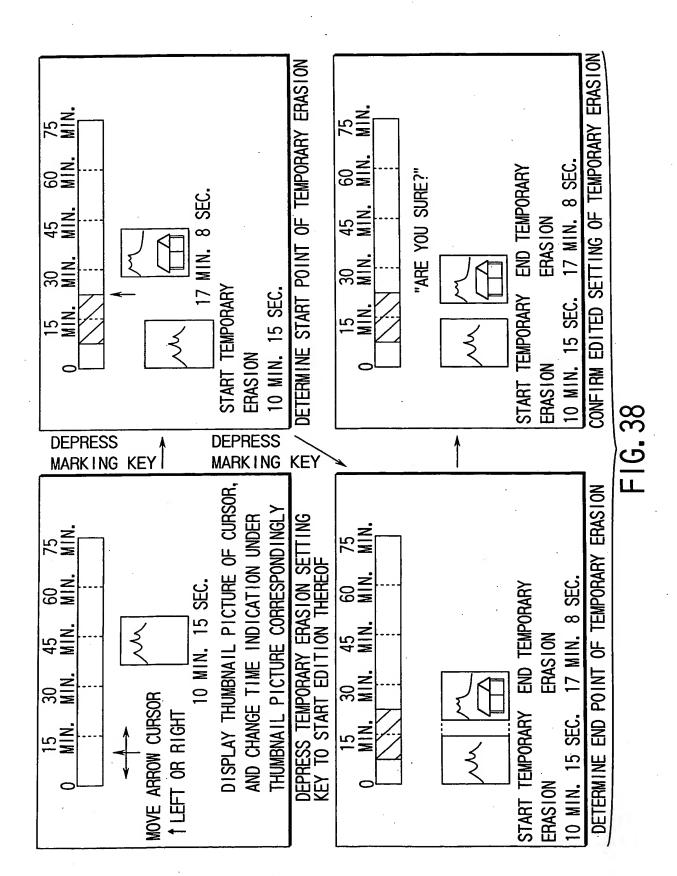


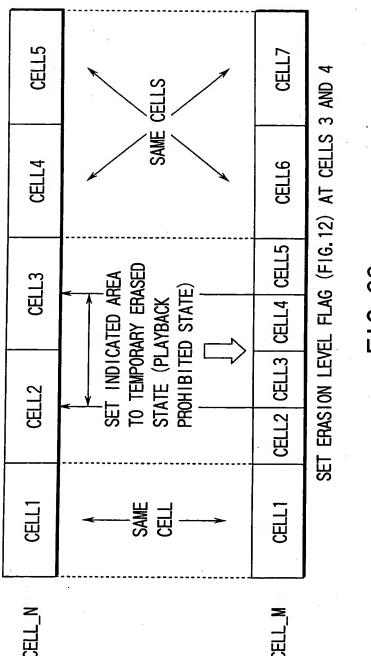
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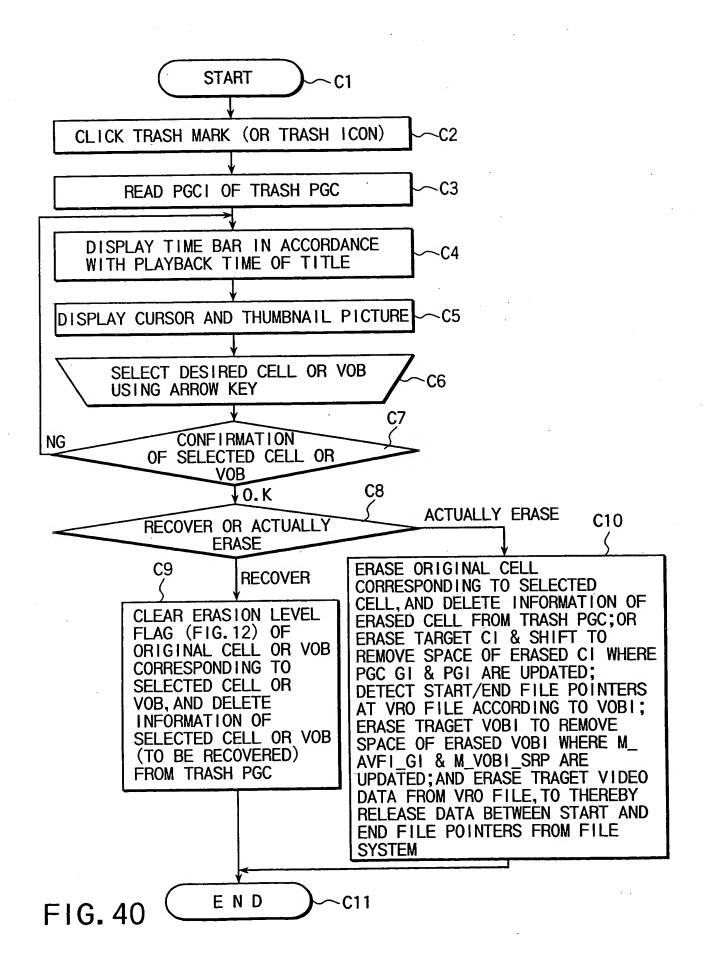
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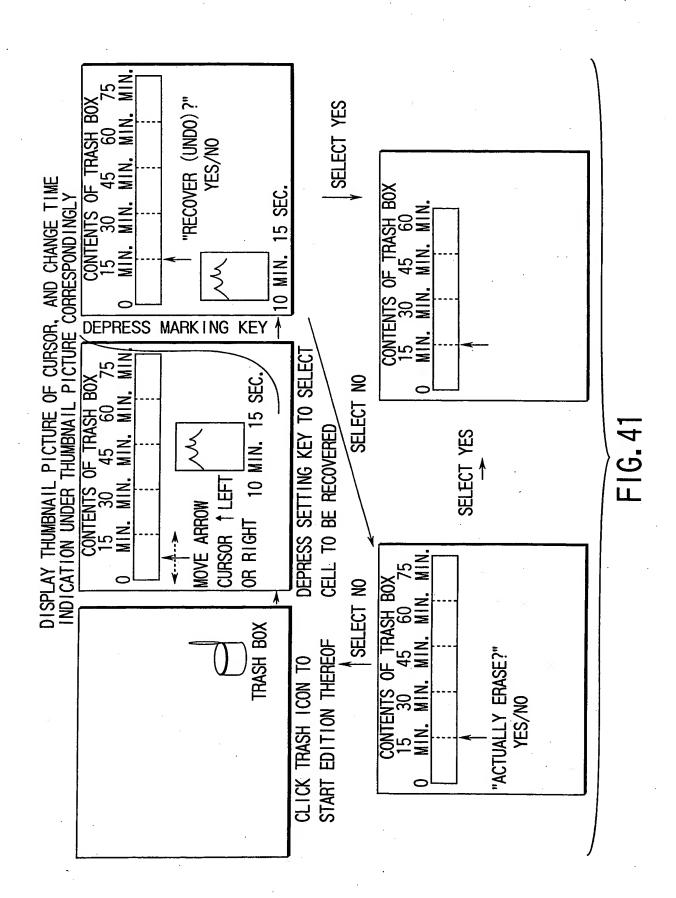


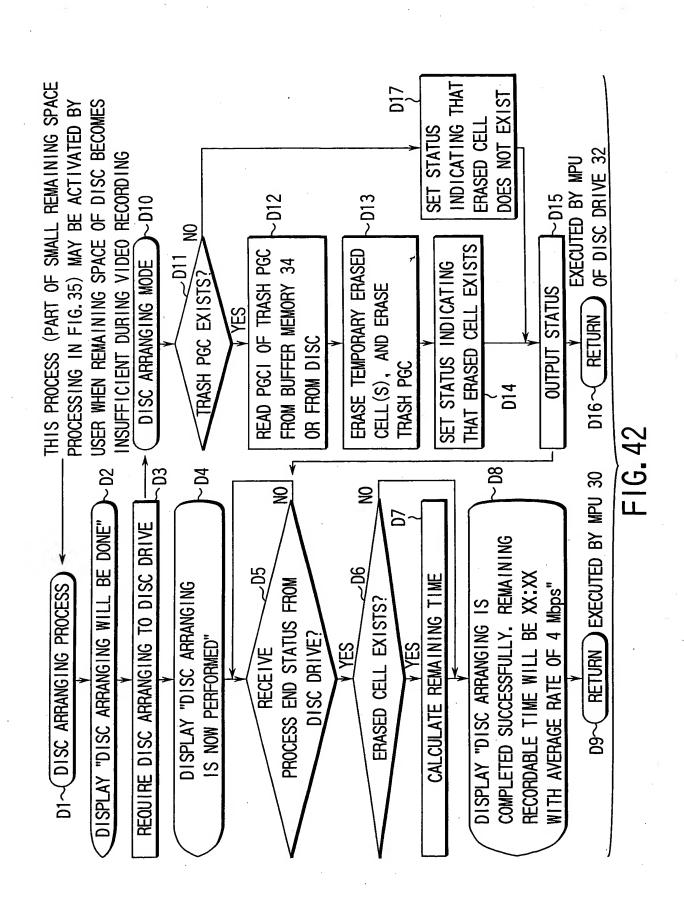


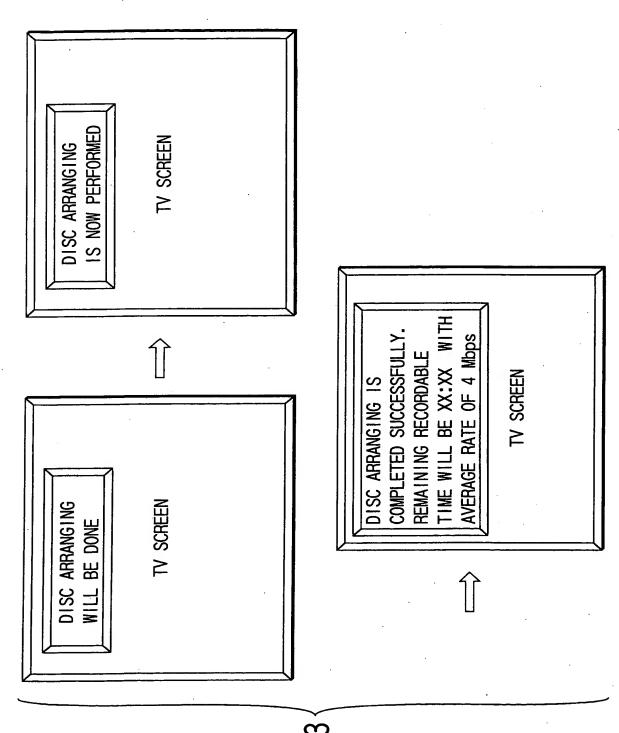




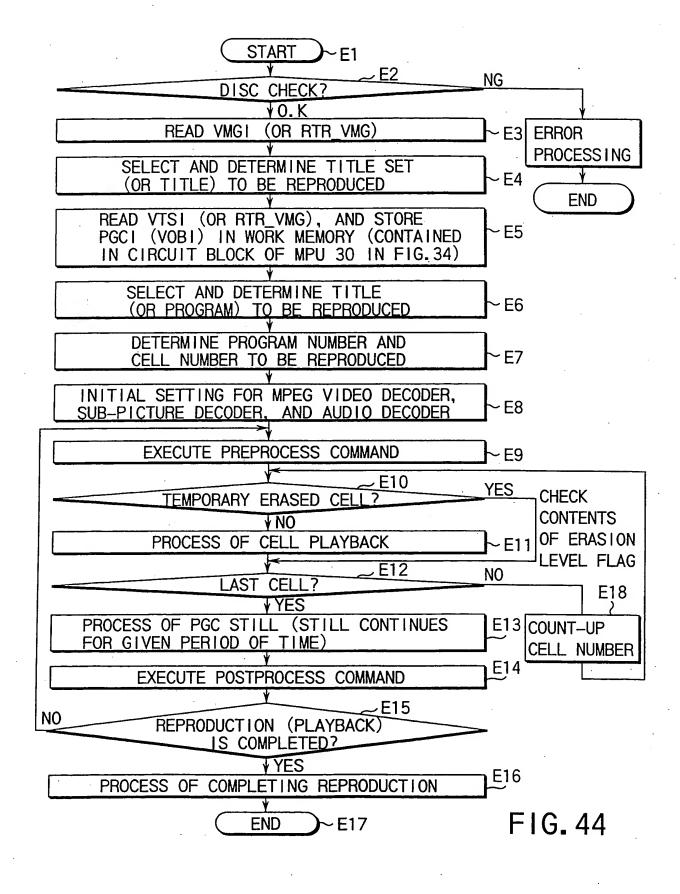


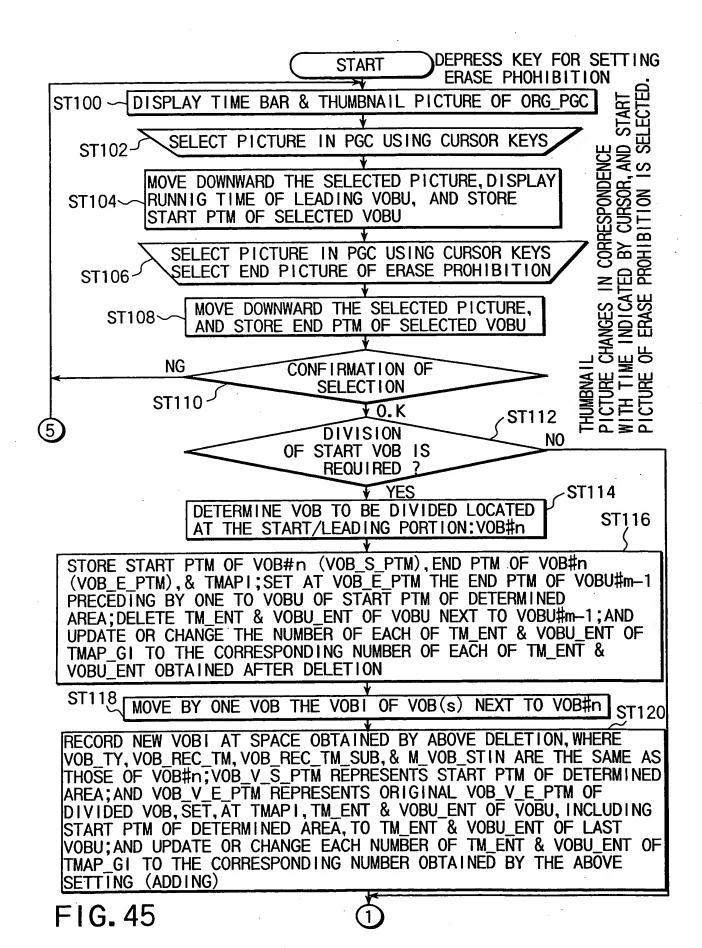




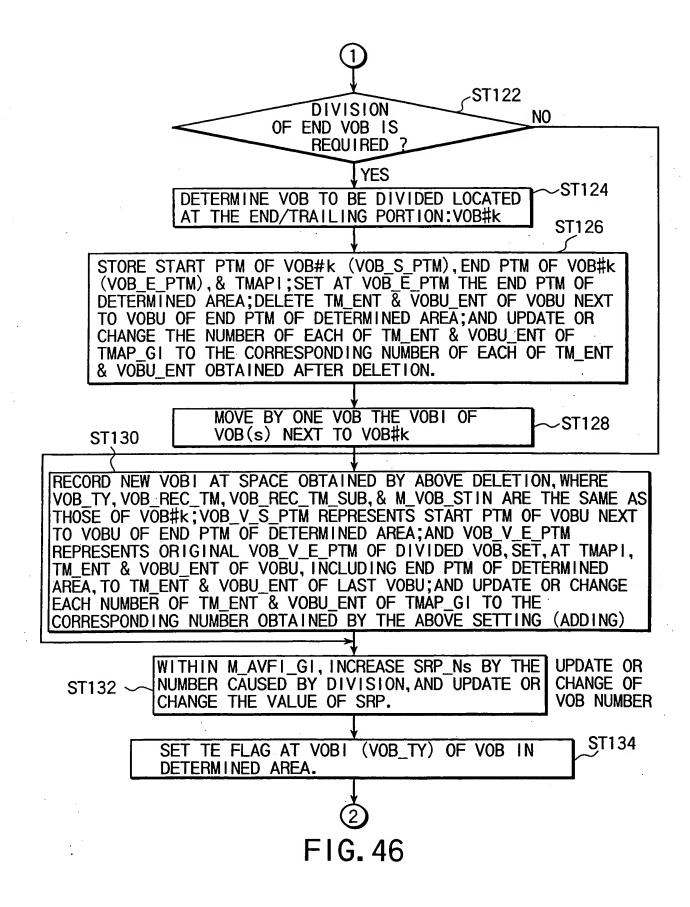


F16. 4

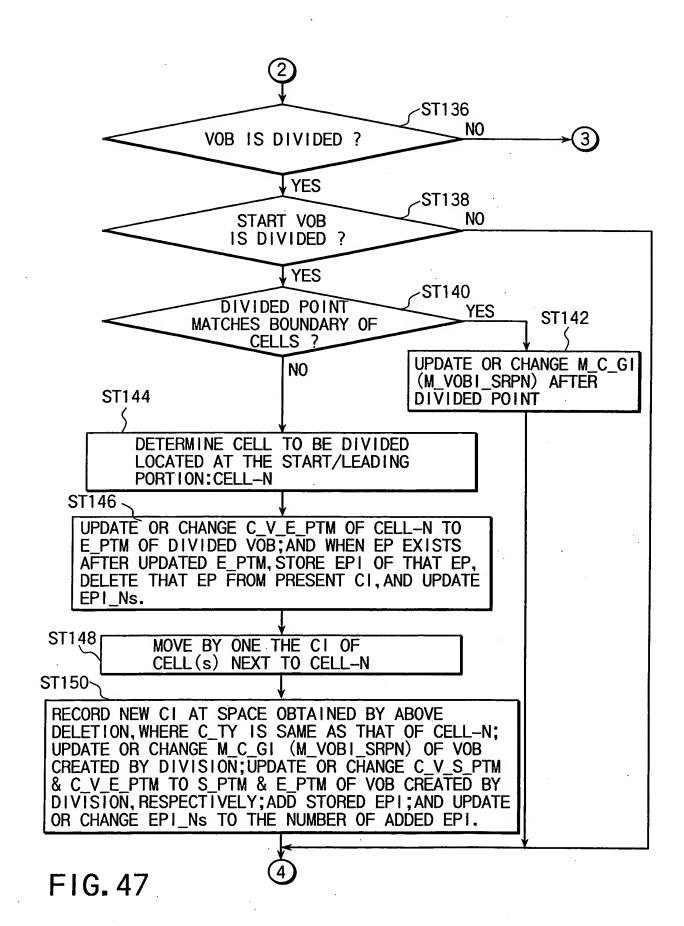


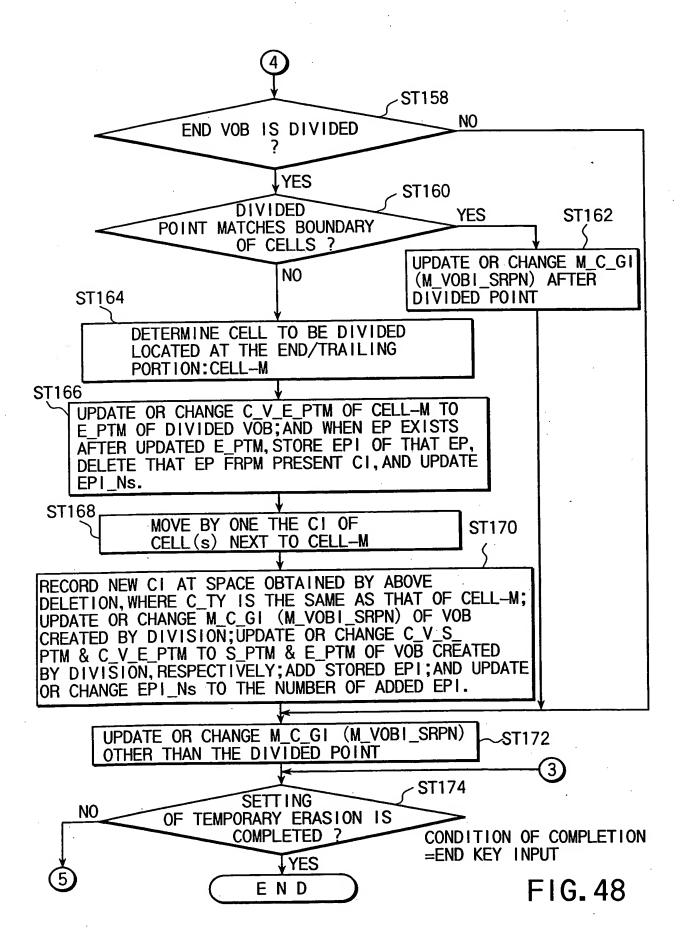


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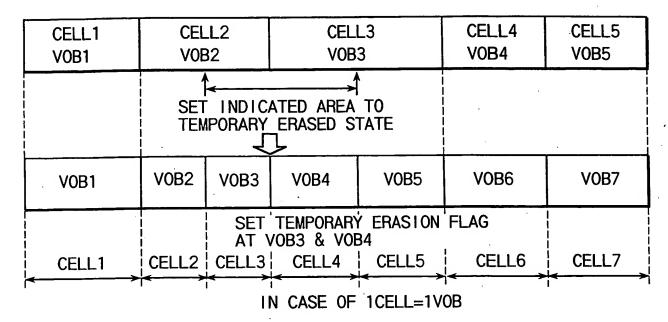


FIG. 49

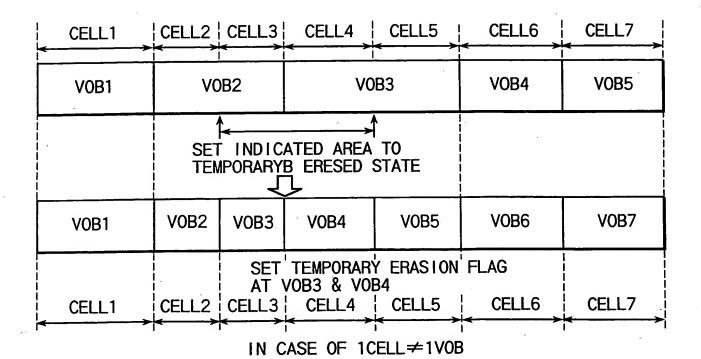


FIG. 50